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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/787,594	06/25/2001	Henning Molsen	YAMAP0757US	4696

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EXAMINER	
NGUYEN, HOAN C	

ART UNIT	PAPER NUMBER
2871	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	09/787,594	MOLSEN ET AL.	
	Examiner	Art Unit	
	HOAN C. NGUYEN	2871	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *19 October 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *38-84* is/are pending in the application.

4a) Of the above claim(s) *38-50,52,53,55-80,83 and 84* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *51,54,81 and 82* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claims 1-37 are cancelled. Nonelected claims 38-50, 52-53, 55-80, 83 and 84 are withdrawn. Claims 51, 54 and 81-82 are elected.

The applicants admitted that the Kubo (US6295109) and the present application is owned by the common assignees at the time of the invention. Examiner placed Kobo(US6295109) with Kubo **(JP11-101992).**

An applicant of an international application that has designated only the U.S. would continue to be required to request publication from WIPO as the reservation under PCT Article 64(*>3<) continues to be in effect for such applicants. International applications, which: (1) **were filed prior to November 29, 2000**, or (2) did not designate the U.S., or (3) were not published in English under PCT Article 21(2) by WIPO, **may not be used to reach back (bridge) to an earlier filing date through a priority or benefit claim for prior art purposes under 35 U.S.C. 102(e)** [see MPEP 706.02(a), section: II. DETERMINING WHETHER TO APPLY 35 U.S.C. 102(a), (b), or (e)]. Applicants admitted that the present application is based on a PCT international application filed 9/22/1999, which is **prior to November 29, 2000**; therefore, a PCT international application may **not be used to reach back to an earlier filing date (9/22/1999) through a priority or benefit claim for prior art purposes under 35 U.S.C. 102(e).** Motomura et al. (US6646702B1) repeated here for rejection.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

1. Claim 51 is rejected under 35 U.S.C. 103(a) as being unpatentable over **Kubo et al. (JP11-101992)** and in view of Hasegawa et al. (US5654780) and Eichenlaub (US5428366A).

Kubo et al. teach (Fig. 2-3) a transflective display comprising

- a liquid crystal 36; the liquid crystal disposed between a front substrate 32 and a rear substrate 37;
- a backlight 39 located behind the liquid crystal,
- a partially reflective mirror 38 located between the liquid crystal and a rear polarizer 9 for both reflecting ambient light back through the liquid crystal and allowing transmission of light from the backlight through the liquid crystal characterized in that each pixel is provided with a color light filter;
- a front polarizer located 30 in front of the front substrate and a rear polarizer is located behind the rear substrate.

wherein

- the rear substrate 32 is provided with the partially reflective mirror 38.

However, **Kubo et al.** fail to disclose

- a liquid crystal divided into a plurality of pixels with addressing means for addressing each pixel and switching each pixel between different states resulting in different levels of transmission of light through the display,
- a transflective display with the backlight comprising a plurality of sequentially flashing light sources.

Hasegawa et al. teach forming addressing means (TFT) for addressing each pixel and switching each pixel between different states resulting in different levels of transmission of light through the display (col. 8 lines 14-21)

Eichenlaub teaches (Fig. 4) a LCD display with the backlight comprising a plurality of sequentially flashing light sources for overcoming the image breakup phenomena (col. 8 lines 54-58).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to further modify a transflective display as **Kubo et al.** disclosed with (a) forming pixels with addressing means (TFT) for addressing each pixel and switching each pixel between different states resulting in different levels of transmission of light through the display for improving quality display (col. 8 lines 20-21); (b) the backlight comprising a plurality of sequentially flashing light sources for overcoming the image breakup phenomena as taught by Eichenlaub (col. 8 lines 54-58).

2. Claim 51 is rejected under 35 U.S.C. 103(a) as being unpatentable over **Motomura et al. (US6646702B1)** and in view of Hasegawa et al. (US5654780) and Eichenlaub (US5428366A).

Motomura et al. teach (Fig. 2-3) a transflective display comprising

- a liquid crystal 32; the liquid crystal disposed between a front substrate 21 and a rear substrate 22;
- a backlight 16 located behind the liquid crystal,
- a partially reflective mirror 26 located between the liquid crystal 32 and a rear polarizer 15 for both reflecting ambient light back through the liquid crystal and allowing transmission of light from the backlight through the liquid crystal characterized in that each pixel is provided with a color light filter;
- a front polarizer located 13 in front of the front substrate and a rear polarizer 16 is located behind the rear substrate.

wherein

- the rear substrate 22 is provided with the partially reflective mirror 26.

However, **Motomura et al.** fail to disclose

- a liquid crystal divided into a plurality of pixels with addressing means for addressing each pixel and switching each pixel between different states resulting in different levels of transmission of light through the display,

- a transflective display with the backlight comprising a plurality of sequentially flashing light sources.

Hasegawa et al. teach forming addressing means (TFT) for addressing each pixel and switching each pixel between different states resulting in different levels of transmission of light through the display (col. 8 lines 14-21)

Eichenlaub teaches (Fig. 4) a LCD display with the backlight comprising a plurality of sequentially flashing light sources for overcoming the image breakup phenomena (col. 8 lines 54-58).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to further modify a transflective display as **Motomura et al.** disclosed with (a) forming pixels with addressing means (TFT) for addressing each pixel and switching each pixel between different states resulting in different levels of transmission of light through the display for improving quality display (col. 8 lines 20-21); (b) the backlight comprising a plurality of sequentially flashing light sources for overcoming the image breakup phenomena as taught by Eichenlaub (col. 8 lines 54-58).

3. Claims 54 and 81-82 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Kubo et al. (JP11-101992)** and in view of Hasegawa et al. (US5654780) and Eichenlaub (US5428366A), and further in view of Handschy et al. (US5347378A).

Maeda et al. fail to disclose a transflective display, in which LC is formed a Pi cell.

Handschy et al. teach (col. 2 lines 51-58) a nematic liquid crystal "Pi-cell has the ability to switch between colors with a voltage level at a significantly faster rate. The nematic liquid crystal inherently has substantially parallel surface director orientation.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to further modify a transflective display as **Kubo et al.** disclosed with a nematic liquid crystal "Pi-cell for switching between colors with a voltage level for providing frame-sequential color displays at fast rate (col. 2 lines 51-58).

4. Claims 54 and 81-82 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Motomura et al. (US6646702B1)** and in view of Hasegawa et al. (US5654780) and Eichenlaub (US5428366A), and further in view of Handschy et al. (US5347378A).

Maeda et al. fail to disclose a transflective display, in which LC is formed a Pi cell.

Handschy et al. teach (col. 2 lines 51-58) a nematic liquid crystal "Pi-cell has the ability to switch between colors with a voltage level at a significantly faster rate. The nematic liquid crystal inherently has substantially parallel surface director orientation.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to further modify a transflective display as **Motomura et al. (US6646702B1)** disclosed with a nematic liquid crystal "Pi-cell for switching between colors with a voltage level for providing frame-sequential color displays at fast rate (col. 2 lines 51-58).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to HOAN C. NGUYEN whose telephone number is (571) 272-2296. The examiner can normally be reached on MONDAY-THURSDAY:8:00AM-4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Nelms can be reached on (571) 272-1787. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

HOAN C. NGUYEN
Examiner
Art Unit 2871

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ANDREW SCHECHTER
PRIMARY EXAMINER